

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 10/525,778	:	PATENT APPLICATION
In re application of: BRUNO BOZIONEK ET AL.	:	
Filed: February 28, 2005	:	METHOD FOR FORWARDING SIGNALING MESSAGES AND CORRESPONDING COMPONENTS
Examiner: Joshua Y. Smith	:	
Group Art Unit: 2477	:	
Confirmation No.: 8327	:	
Attorney Docket No.: 2002P10504WOUS	:	

REPLY BRIEF

Ralph G. Fischer
Registration No. 55,179
BUCHANAN INGERSOLL & ROONEY PC
One Oxford Centre
301 Grant Street
Pittsburgh, Pennsylvania 15219

Attorney for Applicant

The present Reply is hereby filed in response to the Examiner's Answer of September 20, 2010.

INTRODUCTION

The Examiner's Answer makes clear that two key disputes between the parties and the Examiner concern (1) the disclosure provided by the Raffali reference and (2) whether the use of multiple different modulation algorithms for sending data along copper wiring taught by the Bell reference provides any suggestion or motivation for rendering the pending claims obvious.

The Examiner principally relies upon the embodiment of Figure 3 in the Raffali reference to support his rejection of the pending claims. (*See* Examiner's Answer, at 32). This embodiment clearly is only directed to tunneling of messages. No message content is taught as being changed in form or otherwise converted by the tunneling taught by the Raffali reference. In fact, the Examiner admits that "if conversion of an entire message requires that both the overhead and the payload are respectively converted for compatibility with different protocols, Claims 45 and 46 do not contain limitations for such a requirement." (Examiner's Answer, at 31-32).

Further, as admitted by the Examiner, **"the Bell reference is silent with respect to the use of different signaling message protocols."** (Examiner's Answer, at 62). The Bell reference provides no motivation or suggestion for any change to signaling messages. In fact, as admitted by the Examiner and as is clear from the Bell reference, Bell is not even directed to signaling messages.

I. Claims 45-46 Are Allowable

A. The Examiner Admits The Raffali Reference Does Not Teach Signal Message Conversion

In the Examiner's Answer, the Examiner states that "if conversion of an entire message requires that both the overhead and the payload are respectively converted for compatibility with different protocols, Claims 45 and 46 do not contain limitations for such a requirement." (Examiner's Answer, at 31-32). The conversion of a signaling message from one protocol to another requires such a conversion. A conversion of a message is not merely tunneling, as is well understood in the art. Indeed, because conversion of messages requires a complete conversion of an entire message instead of mere encapsulation utilized in tunneling, there is usually data loss associated with the conversion of the message. (*See e.g.* Specification, at paragraphs 53-55). This is recognized in the art and it is understood in the art that a conversion of a message into a different protocol converts the entire message. (*Id.*).

1. The Converting of Signaling Messages Into Different Protocols Is Required In Claims 45-46

The Examiner also states that claim 45 does not require any conversion of a signaling message from one protocol into another protocol. (Examiner's Answer, at 32). This is contradicted by the express terms in claims 45-46. Claim 45 requires the first signaling protocol to be different than the second signaling protocol and for a signaling message to be converted from the first protocol to the second protocol. Specifically, claim 45 includes the limitation "converting the signaling message received from the first device *to a converted signaling message having a second signaling protocol that is different from the first signaling protocol* if the second device does not support the first signaling protocol." (emphasis added). The first and second signaling protocols are different protocols, as explicitly stated in claim 45.

B. The Raffali Reference Is Only Directed To Tunneling

In the Examiner's Answer, the Examiner contends that Raffali's disclosure of tunneling via encapsulation is a conversion of messages. Conversion means to change from "one form or function to another." "convert." Merriam-Webster Online Dictionary, 2010. <http://www.merriam-webster.com> (29 September 2010). The tunneling disclosed by the Raffali reference does not change a message from to another. Tunneling merely encapsulates one message that remains unchanged. The tunneled message disclosed by the Raffali reference is a message that is never changed in form.

The Examiner argues that the embodiment shown in Figure 3 of the Raffali reference is what he relied upon to reject the pending claims. (Examiner's Answer at 25). In so doing, the Examiner admits that the Raffali reference is merely directed to tunneling. The embodiment shown in Figure 3 of the Raffali reference is also only directed to tunneling. There is no conversion of any messages as required by the claims taught or suggested in Figure 3 of the Raffali reference. As made clear at Column 4, lines 43-47, the system of Figure 3 disclosed by the Raffali reference merely utilizes a translation mechanism for appending headers of a message so the message may be tunneled. For instance, an "original header H_2 is preceded by the headers H_3 , H_4 , H_5 respectively, and that the original trailer T_2 is followed by the trailers T_3 , T_4 , T_5 , respectively." (Raffali reference, at Col. 4, lines 43-45). The appending or translating disclosed in Column 4 of the Raffali reference is merely directed to different methods of encapsulating a message for tunneling within a subnetwork. As is clear from Figure 3a, there is no converting of the original message information such as H_2 and T_2 .

C. The Raffali Reference Does Not Teach Or Suggest Any Device Determining A Destination Device A Message is Intended For

The Examiner states that "claim 45 odes [sic] not contain limitations involving a device determining which destination device a message is intended for." (Examiner's Answer, at 30). To the contrary, claim 45 states that a protocol conversion device "converting the signaling message received from the first device to a converted signaling message having a second signaling protocol that is different from the first signaling protocol if the second device does not support the first signaling protocol." To do such converting, the destination of the message to the second destination device must be determined. It is implicit in the requirements of claim 45.

The Examiner's failure to address the argument asserted by Applicants is an admission that the cited art does not teach or suggest such a device. This is particularly true when claim 45 clearly requires the network access device to determine whether a recipient device of a message can support the signaling protocol of the message so that the message may be converted, if necessary, prior to sending the message to the recipient device as required by claim 45.

II. Claims 33-35, 37, 39-44 And 47-51 Are Allowable

A. The Bell Reference Is Not Directed To Signaling Messages

In the Answer, the Examiner argues that Bell teaches a conversion of messaging and that this is a suggestion applicable to the conversion of signal messages. (*See e.g.*, Examiner's Amendment, at 62-63). To the contrary, the conversion of messages Bell is directed to is the conversion of a modulation used to transport data along copper wires. (*See e.g.* Bell, Abstract, Col. 1, lines 45-49, Col. 2 lines 9-12). Specifically, Bell's invention is directed to a device that permits a "common data transfer technique across a common transmission medium." (Bell, at Col. 2, lines 19-20). That transmission medium is copper wiring used for traditional phone connections. (*See* Bell, Col. 4, lines 38-43; Col. 8, lines 12-17). Copper wiring is used to

communicate with a local network of area 106 and to communicate with a remote service provider 100. (*Id.*; Col. 6, lines 40-46).

The Examiner cites various portions of Bell as teaching a conversion. Applicants do not dispute that the Bell reference uses the term "conversion." However, the Bell reference must be read in the context of the disclosure provided by Bell. Taking words found in a word search and then reinterpreting their meaning beyond what is disclosed by a reference is improper. A prior art reference must be considered in its entirety. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); MPEP § 2141.02. Taking the entirety of the Bell reference into consideration, the teaching of a master node to convert data transmission protocols is directed to the change in modulations that may be made to transport data along copper wiring. (*See* Bell, Col. 5, line 45 through Col. 6, line 46, Col. 7, lines 25-54).

**1. The Examiner Admits Bell Is Silent
With Respect To Signaling Messages**

The Examiner admits that Bell is not directed to signaling messages. (Examiner's Answer, at 62). Specifically, the Examiner states that **"the Bell reference is silent with respect to the use of different signaling message protocols."** (*Id.*).

2. Bell Is Directed To Data Transmission Schemes Using Modulations

The Examiner states that Bell never uses the term "data transport messages." However, Bell's whole disclosure is directed to data transmission schemes for transmitting data such as files. (Bell, at Col. 6, lines 1-3 and lines 40-46). As the Examiner admits, data transport concerns the transmission of substantial data such as data files, network mail, etc. (Examiner's Amendment, at 60). As the Examiner admits, data transport involves devices of different layers. *Id.*

Further, as known in the art, signaling messages are directed to the initiation, management and termination of a service or state in a system. They are not directed to the modulation used to convey data as taught by Bell. Instead, the signaling messages are for the devices that create connections, oversee connections, or manage a state of some service. (Specification, at ¶ 4). Signaling protocols "are customarily defined for a particular interface." (*Id.* at ¶ 5).

The Examiner contends that Column 7, lines 46-49 show that Bell teaches a change in protocol in the embodiment shown in Figure 4. As noted above, the change in protocol is regarding a change in modulation for data to be transmitted over copper wiring to different devices. The protocol conversion is not changing the data of the messages into different formats. This is made quite clear, for example, in Column 8, lines 13-17 of Bell, which states that "data is processed 514 in the DSP engine by running a modulation algorithm. The data is then transferred 516 to the remote destination node using the modulation technique determined by the DSP engine."

3. Bell is Not Directed to Different Signaling Messages Or Different Signaling Protocols

The Examiner contends that the changing of modulations taught by Bell is somehow a teaching or suggestion relevant to converting a signaling message from one protocol to a different protocol. Such a contention is not supported by the teaching of Bell. No one of ordinary skill in the art would think to modify the tunneling taught by the Raffali reference with the change in modulations for data transport over copper wiring taught by the Bell reference to develop a method or device that converts signaling messages into signaling messages of different signaling protocols.

The modification of Bell required by the Examiner requires one of ordinary skill in the art to alter the fundamental principle of operation of the invention of the Bell reference, which is the changing of modulations sent along copper wires to transfer data. (*See e.g.* Bell, Col. 8, lines 12-17). It would require such modulations to not just change the method by which data is sent along copper wires, but also change that data to different data so that a call or connection may be formed or maintained via different data content. Such a modification is not suggested by Bell and is not within the disclosure provided by Bell.

4. Bell Is Not Directed To Signaling Messages

As noted above, the Examiner admits Bell is not directed to signaling messages. Bell cannot and does not disclose or suggest any conversion of signaling messages nor forwarding of messages that do not have signaling message protocols changed if such a change is determined not to be needed.

In the Examiner's Answer, the Examiner states that in spite of the non-disclosure of converting signaling messages (Examiner's Answer, at 9), Bell does not say anything about never utilizing signaling messages. (Examiner's Answer, at 58). However, Bell is being cited for suggesting something about signaling messages. As the Examiner admits, Bell is not directed to nor even mentions signaling messages or the conversion of such messages. (*Id.*). Clearly, Bell cannot suggest a change to signaling messages or mechanisms directed to the possible conversion of signaling messages if the reference is silent with respect to those messages.

CONCLUSION

The European Patent Office reviewed a counterpart application to the present application and found claims having a similar scope to the currently pending claims to be allowable and granted European Patent No. EP 1 535 477 B1. The recognition by others in the art that the claimed invention is novel, non-obvious, and warranting of patent protection is an indicia that the pending claims are allowable. The Examiner has failed to meet his burden of proving otherwise. Specifically, the Examiner has failed to establish his burden of proving that the pending claims are anticipated or obvious.

For at least the above reasons, reversal of the rejection of claims 33-51 and allowance of these claims are respectfully requested.

Respectfully submitted,

Dated: November 8, 2010

/Ralph G. Fischer/

Ralph G. Fischer
Registration No. 55,179
BUCHANAN INGERSOLL & ROONEY PC
One Oxford Centre
301 Grant Street, 20th Floor
Pittsburgh, PA 15219-1410
(412) 392-2121

Attorney for Applicants